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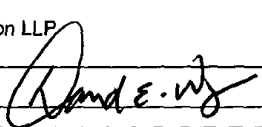
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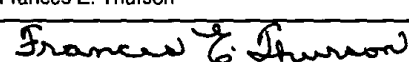
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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	<b>Application Number</b>	09/998,867
	<b>Filing Date</b>	November 29, 2001
	<b>First Named Inventor</b>	Ying Wen Hsu
	<b>Group Art Unit</b>	To be Assigned
	<b>Examiner Name</b>	To be Assigned
<b>Total Number of Pages in This Submission</b>	7+50 reisl	<b>Attorney Docket Number</b> 263/288

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment / Response  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input checked="" type="checkbox"/> Information Disclosure Statement (2 pp)  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Response to Notice to File Corrected Application Papers  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application)  <input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1. PTO Form 1449 (4 p.) 2. Copies of 50 cited references 3. Return Receipt Postcard
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Firm or Individual name	Lyon & Lyon LLP
Signature	By:  David E. Wang, Reg. No. 38,358
Date	February 21, 2002

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Patent  
263/288

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

**Ying Wen Hsu**

**Serial No.:** 09/998,867

**Filed:** November 29, 2001

**For:** METHOD AND APPARATUS FOR CHANGING  
THE OPTICAL INTENSITY OF AN OPTICAL SIGNAL  
USING A MOVABLE LIGHT TRANSMISSIVE  
STRUCTURE

**Group Art Unit:** To Be Assigned

**Examiner:** To Be Assigned

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Commissioner for Patents  
Washington, D.C. 20231

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In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO-1449 and copies are enclosed for the convenience of the Examiner.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicant is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

**INFORMATION DISCLOSURE STATEMENT FILING PROVISION:**

This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) within three months of the filing date of the application, which is not a continued prosecution application filed under § 1.53(d); or (2) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

No item contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this statement after making

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reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this IDS.

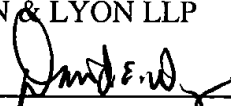
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Respectfully submitted,  
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Dated: February 21, 2002

By: \_\_\_\_\_

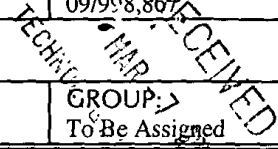
  
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90071

FORM PTO-1449  LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)	ATTY. DOCKET NO. 263/288	SERIAL NO. 09/998,867
	APPLICANT: Ying Wen Hsu	
	FILING DATE: November 29, 2001	GROUP: To Be Assigned



**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA	4,693,547	09/15/1987	Soref et al.	350	96.13	02/24/1986
	AB	5,235,672	08/10/1993	Carson	395	24	02/06/1991
	AC	5,245,458	09/14/1993	Taylor	359	108	02/22/1990
	AD	5,757,986	05/26/1998	Crampton et al.	385	2	09/21/1993
	AE	5,761,350	06/02/1998	Koh	385	14	01/22/1997
	AF	5,828,800	10/27/1998	Henry et al.	385	20	06/23/1997
	AG	5,923,798	07/13/1999	Aksyuk et al.	385	19	05/15/1997
	AH	5,990,473	11/23/1999	Dickey et al.	250	231.13	02/04/1998
	AI	6,072,924	06/06/2000	Sato et al.	385	18	09/02/1997
	AJ	6,137,941	10/24/2000	Robinson	385	140	09/03/1998
	AK	6,148,124	11/14/2000	Aksyuk et al.	385	24	11/20/1998
	AL	6,205,267 B1	03/20/2001	Aksyuk et al.	385	19	11/20/1998
	AM						

**FOREIGN PATENT DOCUMENTS**


EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
	AN	EP 1,004,910 A2	05/2000	EP	G02B	6/35		
	AO							
	AP							
	AQ							
	AR							
	AS							

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)**

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²
	BA	Benaissa, K.; and Nathan, A.; "Silicon Anti-Resonant Reflecting Optical Waveguides for Sensor Applications;" <i>Journal of Sensors and Actuators (A Physical)</i> , Vol. A65, 33-44, 1998	
	BB	Brown, K.S.; Taylor, B.J.; Dawson, J.M.; Hornak, L.A.; "Polymer Waveguide Co-integration With Microelectromechanical Systems (MEMS) for Integrated Optical Metrology;" <i>Proceedings of the SPIE (The International Society for Optical Engineering)</i> , Vol. 3276, 1998	
	BC	Burcham, Kevin E.; and Boyd, Joseph T.; "Freestanding, Micromachined, Multimode Silicon Optical Waveguides at $\lambda = 1.3 \mu\text{m}$ for Microelectromechanical System Technology;" <i>Journal of Applied Optics</i> , Vol. 37, No. 36, 20 December 1998	
	BD	Churenkov, A.V.; "Silicon Micromechanical Optical Waveguide for Sensing and Modulation;" <i>Journal of Sensors and Actuators (A Physical)</i> , Vol. A57, No. 1, October 1996	
	BE	Cook, J.P.D.; Este, G.O.; Shepherd, F.R.; et al.; "Stable, Low-Loss Optical Waveguides and Micromirrors Fabricated in Acrylate Polymers" <i>Applied Optics Journal</i> , Vol. 37, No. 7, March 1, 1998	
	BF	Cornett, Kimberly T.; Heritage, Jonathan P.; Solgaard, Olav; "Compact Optical Delay Line Based on Scanning Surface Micromachined Polysilicon Mirrors;" <i>2000 IEEE/LEOS International Conference on Optical MEMS</i> , Kauai, Hawaii, August 21-24, 2000	
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	BH	Eng, Terry T.H.; Kan, Sidney C.; and Wong, George K.L.; "Voltage-Controlled Micromechanical SOI Optical Waveguides;" <i>IEEE TENCON, IEEE Region 10 International Conference on Microelectronics and VLSI - "Asia Pacific Microelectronics 2000" - Proceedings</i> , 1995	
	BI	Eng, Terry T.H.; Kan, Sidney C.; and Wong, George K.L.; "Surface-Micromachined Epitaxial Silicon Cantilevers as Movable Optical Waveguides on Silicon-on-Insulator Substrates;" <i>Journal on Sensors and Actuators A, Physical</i> , Vol. A49, No. 1-2, June 1995	
	BJ	Eng, Terry T.H.; Kan, Sidney C.; and Wong, George K.L.; "Surface-Micromachined Movable SOI Optical Waveguides;" <i>Proceedings of the International Solid-State Sensors and Actuators Conference - Transducer</i> , 1995	
	BK	Gorecki, Christophe; "Optimization of Plasma-Deposited Silicon Oxinitride Films for Optical Channel Waveguides;" <i>Journal of Optics and Laser Engineering</i> , Vol. 33, No. 1, January 2000	
	BL	Haronian, D.; "Bottlenecks of Opto-MEMS;" <i>SPIE Proceedings - Micro-Opto-Electro-Mechanical Systems</i> , Glasgow, UK, May 22-23, 2000	
	BM	Haronian, D.; "Displacement Sensing Using Geometrical Modulation in Reflection Mode (GM-RM) of Coupled Optical Waveguides;" <i>Journal of Micromechanics and Microengineering</i> , Vol. 8, No. 4, December 1998	

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	CA	Haronian, D.; "Suspended Optical Waveguide With In-Plane Degree of Freedom or Microelectro-Mechanical Applications;" <i>Electronics Letters</i> , Vol. 34, No. 7, 2 <sup>nd</sup> April 1998	
	CB	Hoffmann, Martin; Kopka, Peter; and Voges, Edgar; "Thermo-optical Digital Switch Arrays in Silica-on-Silicon With Defined Zero-Voltage State;" <i>Journal of Lightwave Technology</i> , Vol. 16, No. 3, March 1998	
	CC	Jin, Young-Hyun; Seo, Kyoung-Sun; et al.; "An SOI Optical Microswitch Integrated With Silicon Waveguides and Touch-down Micromirror Actuators;" <i>2000 IEEE/LEOS International Conference on Optical MEMS</i> , 21-24 August, 2000	
	CD	Koyanagi, Mitsumasa; "Optical Interconnection Using Polyimide Waveguide for Multi-Chip Module;" <i>Proceedings of SPIE, Society of Photo-Optical Instrumentation Engineers</i> , San Jose, CA, 1996	
	CE	Kruger, Michiel V.P.; Guddal, Michael H.; et al.; "Low Power Wireless Readout of Autonomous Sensor Wafer Using MEMS Grating Light Modulator;" <i>2000 IEEE/LEOS International Conference on Optical MEMS</i> , Kauai, Hawaii, August 21-24, 2000	
	CF	Kuwana, Yasuhiro; Hirose, Akinori; Kurino, Hiroyuki; et al.; "Signal Propagation Characteristics in Polyimide Optical Wave-guide With Micro-Mirrors for Optical Multichip Module;" <i>Japanese Journal of Applied Physics</i> , Vol. 38, No. 4B, April 1999	
	CG	Makihara, M.; "Microelectromechanical Intersecting Waveguide Optical Switch Based on Thermo-Capillarity;" <i>2000 IEEE/LEOS International Conference on Optical MEMS</i> , Kauai, Hawaii, August 21-24, 2000	
	CH	Makihara, M.; Sato, Makoto; Shimokawa, Fusao; et al.; "Micromechanical Optical Switches Based on Thermocapillary Integrated in Waveguide Substrate;" <i>Journal of Lightwave Technology</i> , Vol. 17, No. 1, January 1999	
	CI	Makihara, M.; Shimokawa, F.; and Nishida, Y.; "Self-Holding Optical Waveguide Switch Controlled by Micromechanism;" <i>IEICE Trans. Electronics (Japan)</i> , Vol. E80-C, No. 2, February 1997	
	CJ	Maruo, Shoji; Ikuta, Koji; and Ninagawa, Toshihide; "Multi-Polymer Microstereolithography for Hybride Opto-MEMS" has the same information as "Advanced Micro Stereolithography with Multi UV Polymers (System Development and Application to Three-Dimensional Optical Waveguides)," which is written in Japanese; <i>Journal of Transactions of the Institute of Electrical Engineers of Japan, Part E</i> , Vol. 120-E, No. 7, July 2000	
	CK	Matsumoto, Takuji; Kuwana, Yasuhiro; Hirose, Akinori; "Polyimide Optical Waveguide With Multi-Fan-Out for Multichip Module System;" <i>Proceedings from the Optoelectronic Interconnects V</i> , Vol. 3288, San Jose, CA January 28-29, 1998	
	CL	Matsumoto, Takuji; Fukuoka, Takeshi; Kurino, Hiroyuki; et al.; "Polyimide Optical Waveguide With Multi-Fan-Out for Multi-Chip Module Application;" <i>Proceedings of the 27<sup>th</sup> European Solid-State Device Research Conference</i> , France, September 22-24, 1997	
	CM	Matsumoto, Takuji et al., "Polyimide Optical Waveguide with Multi-Fan-Out for Multi-Chip Module Application," <i>Jpn. J. Appl. Phys.</i> , Vol. 36 (1997) Pt. 1, No. 38. pp. 1903-1906.	

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-	DA	Moisel, Jorg; Guttman, Joachim; Huber, Hans-Peter; "Optical Backplanes With Integrated Polymer Waveguides," <i>Journal of Optical Engineering</i> , Vol. 39, No. 3, March 2000	
.	DB	Mueller, Raluca; Pavelescu, and Manea, Elena; "3D Microstructures Integrated With Optical Waveguides and Photodiodes on Silicon," <i>MELECOB 1998 9<sup>th</sup> Mediterranean Electromechanical Conference Proceedings</i> , Vol. 1; May 18-20, 1998	
.	DC	Namba, Tohru; Uehara, Akihito; et al.; "High-Efficiency Micromirrors and Branched Optical Waveguides on Si Chips;" <i>Japanese Journal of Applied Physics, Part 1</i> , Vol. 35, No. 2B, August 21-24, 1995	
-	DD	Oillier, Eric; Chabrol, Claude; et al.; "1 x 8 Micro-Mechanical Switches Based on Moving Waveguides for Optical Fiber Network Switching;" <i>2000 IEEE/LEOS International Conference on Optical MEMS</i> , August 21-24, 2000	
.	DE	Ollier, Eric; and Mottier, P.; "Micro-Opto-Electro-Mechanical Systems: Recent Developments and LEIT's Activities," <i>Proceedings of the SPIE - The International Society for Optical Engineering</i> , Vol. 4076, May 22-24, 2000	
	DF	Shubin, I.; and Wa, P.L.K.; "Electrostatically Actuated 1 x 2 Micro-Mechanical Optic Switch;" <i>Electronics Letters</i> , Vol. 37, No. 7; March 29, 2001	
.	DG	Storgaard-Larsen, Torben; "Plasma-Enhanced Chemical Vapor Deposited Silicon Oxynitride Films for Optical Waveguide Bridges for Use in Mechanical Sensors;" <i>Journal of the Electromechanical Society</i> , Vol. 144, No. 4, April 1997	
.	DH	Voges, E.; Hoffmann, M.; "FB1 Optical Waveguides on Silicon Combined With Micromechanical Structures;" <i>Advanced Applications of Lasers in Materials and Processing; LEOS Summer Optical Meeting</i> , 1996; IEEE, Piscataway, New Jersey, 96TH8154	
.	DI	Yariv, A.; "Universal Relations for Coupling of Optical Power Between Microresonators and Dielectric Waveguides;" <i>Journal of Electronics Letters</i> , Vol. 36, No. 4, February 17, 2000	
.	DJ	Yokoyama, S.; Nagata, T.; and Kuroda, Y.; et al.; "Optical Waveguides on Silicon Chips;" <i>Journal of Vacuum Science &amp; Technology A</i> , Vol. 13, No. 3, May-June 1995	
.	DK	_____, "5. Switching Fabric Technologies," <i>Packet Switch Architecture</i> , CS-534, Dept. of Computer Science, University of Crete, Greece (undated document, file last updated April 2000 by M. Katevenis), <a href="http://archvlsi.ics.forth.gr/~kateveni/534/sec5.html">http://archvlsi.ics.forth.gr/~kateveni/534/sec5.html</a> , 35 pp.	
	DL		
	DM		

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